

Pleasant music and comfortable air, both cannot be seen with your eyes. But any musical instrument that presents a beautiful tone is brilliant.



The light and the shadow. Straight and curved lines.  
Action and silence. Everything is harmonized.





From “Good morning!” to “Good night”,  
and to the next “Good morning!”



### For your comfort, 24 hours a day.

Do you believe that “the source of vitality is in the air?” Recently SARS and bird-flu are among harmful viruses to humans. There are also other harmful particles like bacteria, fungi and allergens in the air. By developing technologies to fight against these harmful elements and deliver good dormancy for a delightful day, Samsung opened the new frontier of air conditioners that are completely different from conventional cooling machines.

If you consider about the air, your life would change. Experience the difference first.

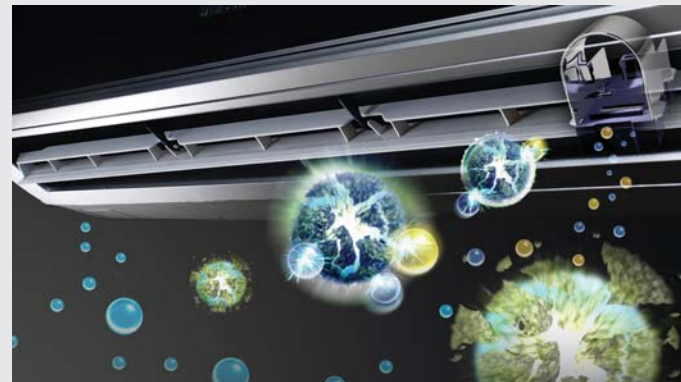


# MICRO PLASMA ION

imagine a cool air that protects you from harmful particles



## Micro Plasma Ion technology created the Purified Zone.



### Micro Plasma Ion Device

The Micro Plasma Ion device creates strong Purified Zone. With innovative technologies admitted globally, the device generates 480,000 ions to strongly purify the air.  
(Ion Quantity: 88ft<sup>3</sup>/min, 1m<sup>3</sup>, Humidity: 19%, Temp: 23°C)

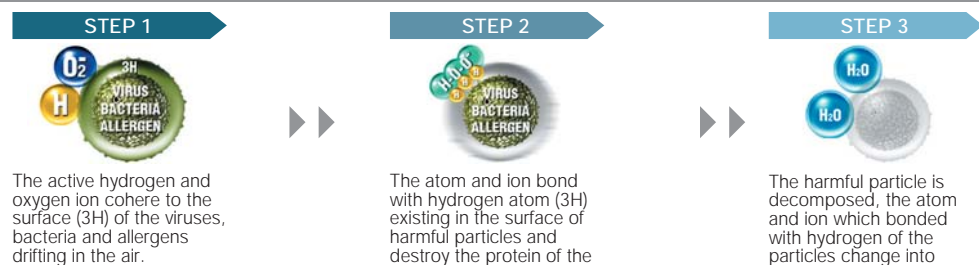
The secret of Micro Plasma Ion decomposing harmful particles lies in the behavior of active hydrogen (H) and oxygen ion (O<sub>2</sub><sup>-</sup>).



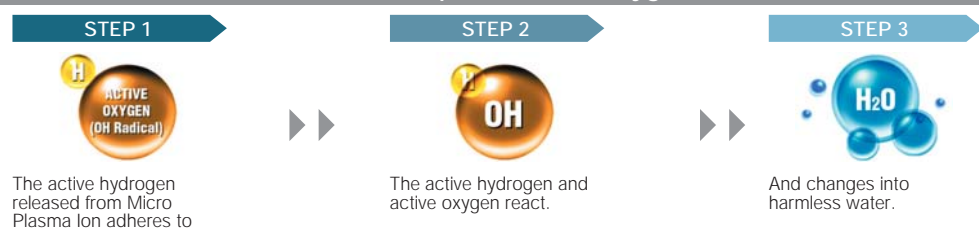
### Generator

In the Micro Plasma Ion device, the Hydrogen ion (H<sup>+</sup>) generated in the device bond with electron (e<sup>-</sup>) and change into active hydrogen (H). Also oxygen contained in the air bonds electron to form an oxygen ion (O<sub>2</sub><sup>-</sup>). Then the active hydrogen and oxygen ion are released into the room.

### Micro Plasma Ion decomposes VIRUSES, BACTERIA and ALLERGENS.



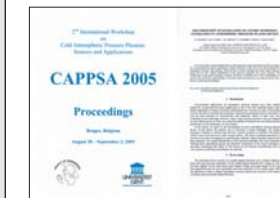
### Micro Plasma Ion decomposes active oxygen (OH Radical).



## Recently, I am little bit anxious about the air.

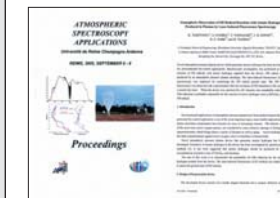
You will come up to anxious articles such as "Bird-flu" or "New Influenza Virus", every time you read a newspaper. The sickness caused by allergens, house dust and molds are also reported. The anxiety of these harmful elements becomes greater if you are ill or if you have a child or an aged person. The Samsung Micro Plasma Ion technology is an innovative technology admitted globally to remove such an anxiety.

### The effect of Micro Plasma Ion is acknowledged by public organizations.



### Atomic Hydrogen Generation

\* Reported at the 2nd International Workshop on Cold Atmospheric Pressure Plasmas, August 30, Bruges, Belgium.



### Active Oxygen (OH Radical) Elimination

\* Reported at the 7th Colloquium ASA Sept. 2005 France.



### Seal of Approval on Removal of Airborne Allergens

\*Test Institute: BAF (The British Allergy Foundation), chamber size (19.16m<sup>3</sup>), Relative humidity: 69%, temperature:20°C

Comparison	SAMSUNG Micro Plasma Ion	Company S	Company P
Generation of Active Hydrogen	World's First	x	x
Removal of OH Radical with Active Hydrogen	World's First	x	Generation of OH Radical
Removal of Flu Virus	99.60%	89.15%	No Data
Removal of Corona Virus	0	x	x
Removal of Airborne Allergens	Mite	0	0
	Pets	0	x
	Chamber Size	19.16m <sup>3</sup> (Room)	1m <sup>3</sup> (Lap) Test Chamber (Small)
	Test Institute	BAF	Hiroshima University Osaka Environment Technology Center
Toxicity Measurement	No Toxicity (Seoul National Univ. Veterinary Medical Center)	No Test	No Data
Ion Quantity (88ft <sup>3</sup> /min, 1m <sup>3</sup> , Humidity: 19%, Temp: 23°C)	480,000	14,000	40,000

## What is SARS?

SARS (Severe Acute Respiratory Syndrome) is an infectious disease that has symptoms of high fever, cough or dyspnea. In the period from November 2002 to July 2003, 8098 people were suspected as being infected and 774 people died from the SARS virus. (From the WHO releasing on September 26, 2003 )

The Micro Plasma Ion is found to be effective in removing the Corona virus which has the similar gene structure as the SARS virus.

## What is Bird-flu?

The bird-flu is an infectious disease caused by Influenza virus which is different from human Influenza virus. Recently, there was a report on rare case of bird-flu infection from human to human. In the case of serious infection, the symptoms of the pneumonia and multi organ failure is reported.

The Micro Plasma Ion is found to be effective in removing the Influenza virus which has the similar gene structure as the bird-flu virus.



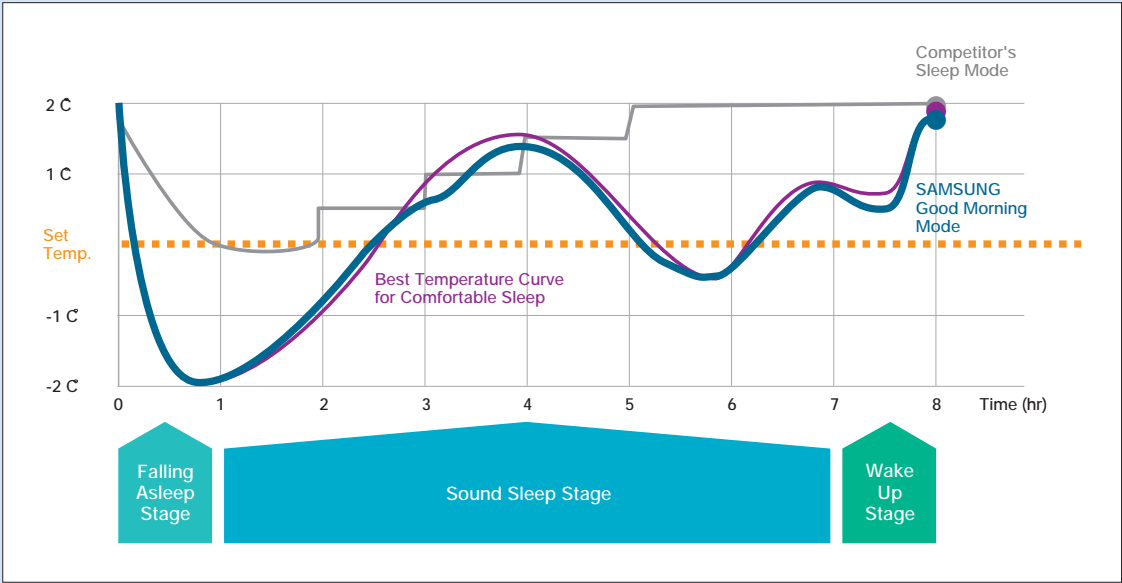
Comfort Zone  
One third of your life is used for sleeping.  
Our air conditioner will make  
your sleeping time more comfortable.

# GOOD MORNING MODE

imagine having refreshing wake up everyday

## Good Morning Mode delivers you a healthy and delightful day.

Today, Samsung is focusing on this precious sleep as a theme for technology development studies. For example, skin temperature of a human while sleeping. Samsung performed experiments on humans to find the best temperature from falling asleep to wake up. Through the experiments on many people, Samsung developed a precise temperature control program that keeps the skin temperature at the best during the 3 stages of dormancy. The Good Morning Mode is a result of one of the studies that Samsung has been undertaking for many years. How about having a good dormancy you have dreamt of?



### Falling Asleep Stage

Quickly cools down the room temperature. Together with comfortable intermittent air, you will be able to fall asleep quickly.



### Sound Sleep Stage

Wavy temperature control and insensible air stream will maintain optimum skin temperature for deep and comfortable sleep.



### Wake Up Stage

Raise room temperature to raise human body temperature for refreshing wake up. Comfortable intermittent air will refresh you even more.



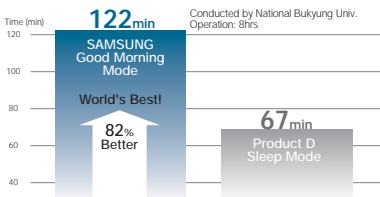
## Recently, I am little bit anxious about the stress from insomnia.

"Would I be able to sleep well tonight?" When you start thinking like this, you would never be able to sleep well. It is not only you who have anxiety like "could I wake up on time tomorrow?" or "being annoyed by wakeful nights". A human spends about one third of the life sleeping. If you live for 80 years, about 27 years are spent for sleeping. As it is so precious, we want to make your sleep more and more comfortable.



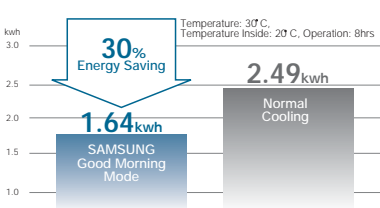
### Deep Sleep Hours

The Good Morning Mode increases the total amount of deep sleep hours.



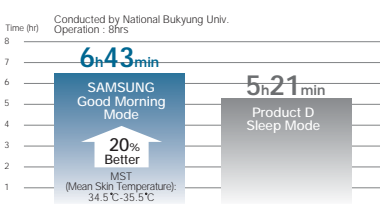
### Energy Saving

The Good Morning Mode reduces up to 30% of electricity consumption compared with a normal cooling mode.



### Pleasant Skin Temperature

The Good Morning Mode maintains comfortable skin temperature throughout the night by the precise temperature control.



### Easy-to-Operate Remote Controller

Simply press the button on the remote controller to switch to the Good Morning Mode.



### Easy Checking of the Operation Status

The display on the main unit informs you when the Good Morning Mode is on.





### Are you really enjoying good sleep?

If you are not satisfied with your sleep, try the “Good Morning Mode.” It will keep your skin temperature at an optimum level, so you will fall asleep quickly and have refreshing wake up without being awakened during the sleep.

Good Morning Mode



#### 82% Longer Deep-sleep Hours

If you can have 82% longer deep-sleep hours you can rest your brain and body fully to recover your vitality. Long deep-sleep hours also contribute to the growth of children.



#### Keeps Optimum Skin Temperature for Sleeping

If you can keep optimum skin temperature during your sleep, you will be free from unpleasant dormancy such as being too hot to sleep or being awakened by coldness. Moreover it will prevent your skin from drying out. Adequate skin moisture reduces the chance of catching a cold.



#### Energy Saving Up to 30%

It Saves up to 30% energy compared with a normal cooling and reduces your worries on electricity bills.

## Multi-Step Air Purifying System

The Samsung Multi-Step Air Purifying System removes almost all harmful elements to human beings by using various filters. At the same time, the system also keeps the interior of the air conditioner ultra-clean, so only ultra-fresh air is produced.

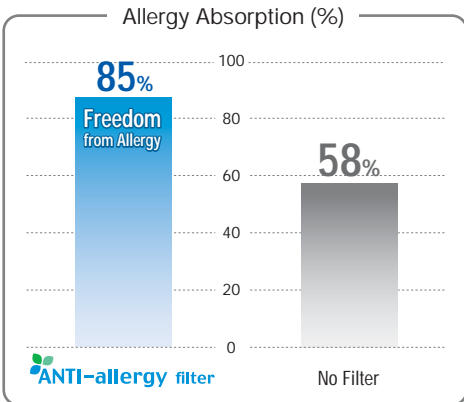
To deliver fresh air, it is essential to purify the air and maintain the cleanliness of the interior of the air conditioner concurrently. The Micro Plasma Ion removes viruses, bacteria, fungi and allergen particles in the air. However an air conditioner's interior is an ideal place for fungi. Fungi will propagate and the air conditioner produces air with an unpleasant odor. Therefore, all key components inside Samsung air conditioners are treated with anti-bacterial and anti-mold agents. Because both air, inside and outside of the air conditioner is ultra-clean, you can always enjoy the freshest and cleanest air.



### ANTI-allergy filter

ONLY IN SAMSUNG

The Anti-allergy filter of the air purifying system makes your skin feel fresh and clean. It removes invisible dust and bacteria, resulting in helping you avert allergy problems associated with such allergens.

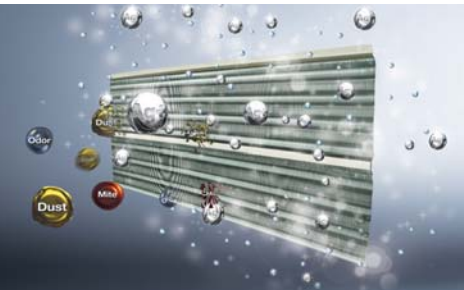


It will protect you from allergy-causing particles

### Silver Coated Evaporator

ONLY IN SAMSUNG

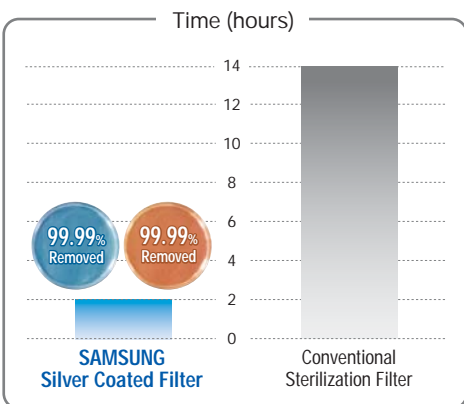
Samsung's Silver Coated Evaporator incorporates an innovative material found to be environmentally friendly. The triple coated (2 layers of chrome-free neo silica, 1 layer of Silver Nano) fins of the evaporator ensure the efficient removal of condensation and to guarantee the production of clean, fresh air.



### Silver Coated Filter

ONLY IN SAMSUNG

The air conditioner's outermost filter is uniquely treated with an antibacterial silver-nano agent to remove most viruses. With the Silver-Coated Filter, the respiration of these viruses is stifled, inhibiting their cell growth, causing them to die. The viruses are removed speedily in only 2 hours.



Silver Nano ion gives you fresher and healthier air

(Filter type may differ according to the air conditioner model.)



# smart inverter

(Optional)



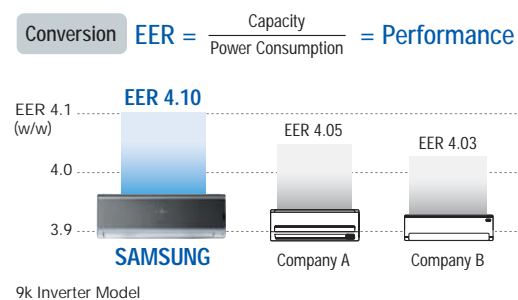
## Saving Energy and Electric Bill with the Smart Inverter

If you want to reduce the electricity bill for an air conditioner, an inverter technology that can make the better use of electricity is a must. Samsung developed Smart Inverter Technology, that realizes an incredible low energy consumption of up to 50% compared with a conventional non-inverter air conditioner. Powerful and delicate control enables you to reach the set temperature quickly and keep the temperature precisely. The operating noise is kept low so that you may not even notice. The Smart Inverter Technology significantly removes running cost anxiety.

## High Efficiency



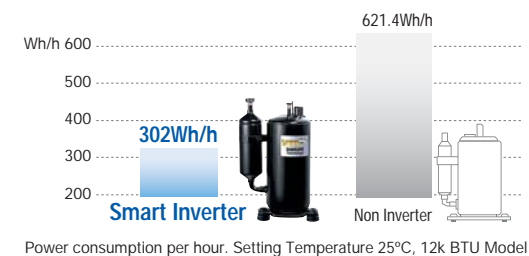
Powerful and speedy cooling/heating at minimum electricity consumption, realized by the Smart Inverter Technology. With high energy efficiency operation and precise temperature control, you can reduce your electricity bill greatly resulting in better cost savings.



## 51.4% Energy Saving



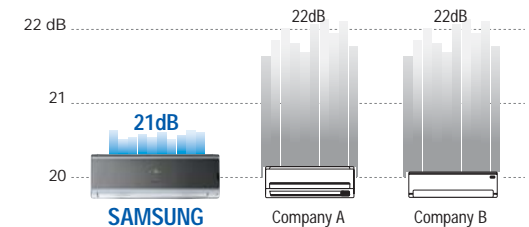
After reaching the set temperature, the Smart Inverter Air Conditioner changes its operation mode to economic. By avoiding inefficient and frequent switching on and off of the non-inverter air conditioner, the Smart Inverter saves 51.4% energy compared with a non-inverter air conditioner.



## Silent Operation

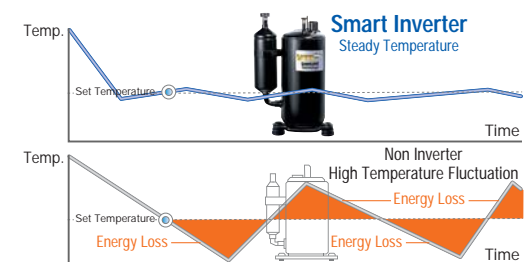


Enjoy the sweet silent operation of your air conditioner. Once the desired temperature is reached by the air conditioner, the air conditioner's compressor works at a lower speed to maintain the temperature resulting a quieter motor and fan noise assuring greater comfort whilst operating.



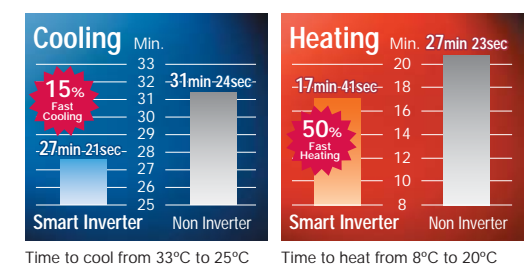
## Comfortable Temperature

The Smart Inverter Air Conditioner works at the maximum capacity at start up. As soon as the temperature reaches the desired set temperature, it finely adjusts its capacity to cope with any changes. This means less temperature fluctuation and assures you greater comfort that can be achieved in minutes.



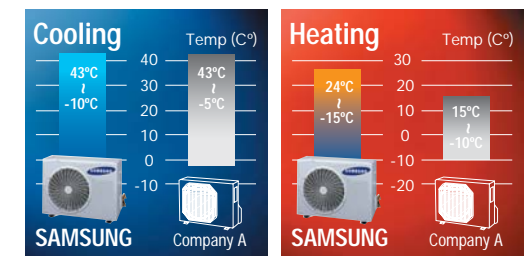
## Fast Cooling and Heating

When you change the setting of the temperature, the air conditioner will use the maximum capacity of the compressor to reach the set temperature quickly, resulting 15% faster cooling and 50% faster heating.



## All Temperature Performance

No need to worry with the operation of an outside unit for a Samsung air conditioner in severe temperatures. With a wider range of temperature allowance than other companies, the unit can cool the air in burning heat of 43°C or heat the air in freezing coldness of -15°C to optimise comfortable air.



(Smart Inverter is an optional feature for selected regions only.)



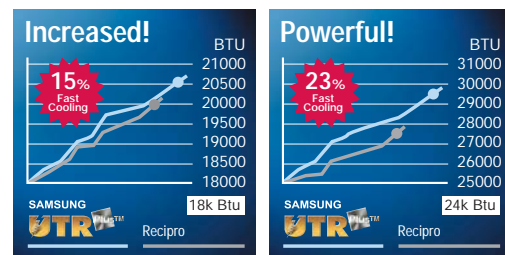
# UTR Plus™

## The Powerful UTR Plus™ for Rapid Cooling from Samsung

Samsung developed the UTR (Ultra Tropical Rotary) Plus™ compressor featuring incredible power that can quickly cool the air even under the severe hot climate. The UTR Plus™ with its high torque motor has the reliability to maintain the superb performance even under the severe temperatures of up to about 60°C/140°F for a long time. The latest UTR Plus™ succeeded in saving energy consumption and increased the energy efficiency by 10%. Now, switch on your air conditioner and enjoy the refreshing cool air brought to you by the UTR Plus™.

## Performance Reliability Certificate

Even under extreme temperatures, customers can rely on their air conditioner's performance to provide powerfully cool air rapidly, allowing them to immediately enjoy the cool comfort of their homes and offices.



## High-Efficiency Compressor

**EER : 5~10% Higher than Reciprocating Compressors**  
Samsung air conditioner with its UTR Plus™ compressor has increased energy capacity, more powerful efficiency, with decreased power consumption.



## Light Weight - Easy Maintenance

**Weight : 30 % Lighter than reciprocating Compressors**  
The UTR Plus™ compressor, comprised of innovative and durable yet lightweight materials, allows for stress-free maintenance. Because it is 30% lighter than reciprocating compressors, it is also easier to install.



## Longer Life

Because the lifetime of the UTR Plus™ compressor has been extended thanks to durable materials and a new welding method, you can enjoy the performance of your air conditioner for an extended length of time.

- Test Center:
- Received Certificate of Performance from Univ. of Maryland (USA)
- Test Condition:
- 1000 hrs Acceleration Test (Continuous Run)
- **UTR Plus™**
- VS Recipro
- Ambient Temperature = 54°C

Reciprocating Compressor		
Components	Wear Rate	Judgement
Shaft	200%	Not Satisfactory
Connecting Rod	90%	Not Satisfactory
Wrist Pin	48%	Not Satisfactory
Lower Bearing	108%	Not Satisfactory
Upper Bearing	82%	Not Satisfactory
Piston	85%	Not Satisfactory

Samsung Tropical Compressor		
Components	Wear Rate (%)	Judgement
Shaft	5%	Excellent
Roller	15%	Good
Vane	1%	Excellent
Upper Bearing	17%	Excellent
Lower Bearing	12%	Good
Cylinder	11%	Excellent

## Performance Reliability Certificate

Certificate received from the Center for Environmental Energy Engineering (CEEE), University of Maryland, USA. Test results for performance and reliability concluded that Samsung's UTR Plus™ compressor showed bearing performance and resultant expected field life 80% to 100% better than that of commercially available reciprocating compressors.



(UTR Plus™ is an optional feature for selected regions only.)



## Other Features

### Easy view circular LED display

Digital i, a large circular LED display, lets you keep an eye on the comfort of your room. At a glance, you can see the state of your room, the convenient digital icons assist you in operating the air conditioner effortlessly.



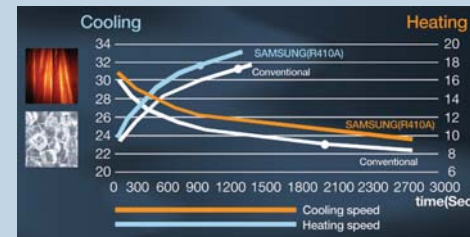
### Waterfall Heating Air Flow

The new Samsung air conditioners feature a wide-angle blade system. In conventional models, the indoor unit's blade could only open up to 70 degrees, which made it difficult to direct heated airflow to the lower spaces of the room. The wide-angle blade system can open the blades to an angle of 90 degrees. You can control air flow direction vertically and horizontally, providing even distribution of air to any place of the room.



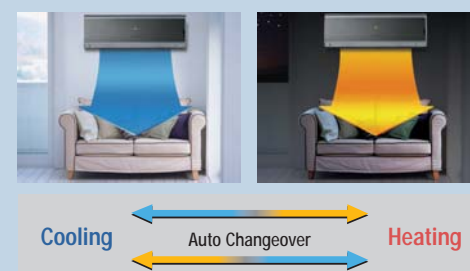
### Rapid Cooling and Heating

Everyone wants to have the room temperature in the ideal state when they come home. Especially in severe hot or cold weather. With the exceptional technical characteristics and superior quality features, the new Samsung air conditioners maximize the speed of cooling and heating to reach the set temperature in a short time.



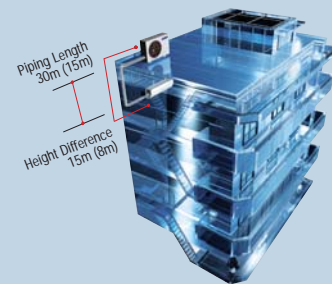
### Auto Changeover

The Auto Changeover automatically selects the operating mode (Cooling or Heating) according to the temperature setting. Thus, when a temperature is selected in the auto mode, the air conditioner heats and cools as required to maintain the set temperature.



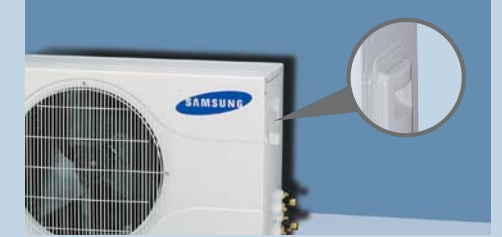
### Outdoor Installation Pipe

The connection pipe is extendable up to 30 meters in length and up to 15 meters in height (18,000-24,000Btu/h) [or 15 meters in length and 8 meters in height (9,000-12,000Btu/h)]. So there is great flexibility in the choice of location for the outdoor unit.



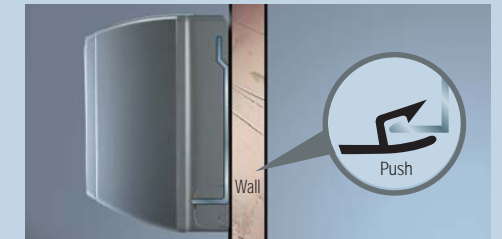
### Easy Handle for Convenience during Transporting, Unloading, etc

The lightweight and compact outdoor unit is equipped with a handle for convenience during transporting, unloading, etc. Because the outdoor unit can be carried with ease, installation is quick and simple.



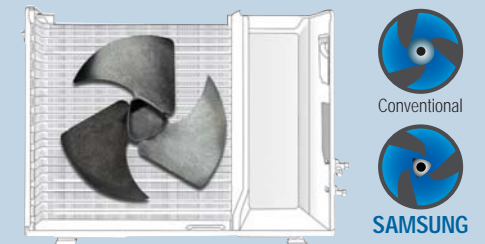
### One-touch Hanger Plate

The indoor unit and the installation plate can be removed easily just by pressing the lower part of the indoor unit as shown in the figure.



### Energy Efficient and Quiet Fan

In the outdoor unit, the new propeller fan has better performance characteristics due to its triangular hub shape, resulting in enhanced energy efficiency and fan capacity, greater hot temperature resistance, and quieter operation.



### Improved Low Temperature Operation

Improved heating capacity ultimately results in improved performance in low temperatures. Moreover, the new base structure of the outdoor unit includes three drainage holes and extended drainage channels, providing better protection for the cabinet against excess water, freezing, and rust. An automatic defrosting algorithm developed specifically for cold countries allows smooth heating operation with outdoor temperatures below 0°C.



Extended drainage channels

### Water Leakage Double Protection

Samsung, for the first time, has adopted a double water leakage protection system. The tray drain at the bottom of the unit has been deepened by 5 mm. The drainage channel on the front panel prevents walls and carpets from being saturated by the water drops.



(Features differ according to the air conditioner model.)



Reflects Your Interior to Make Your Room Look Wider.  
There are Infinite Possibilities in the World of  
the Shadow Mirror.



Shadow Mirror Model



### Shadow Mirror

By reflecting your interior on the shadow mirror, Vivace matches with your interior perfectly. The Samsung's shadow mirror reflects adequate amount of light adding elegant image to your interior.



### Hidden Display

When you switch on the air conditioner, a hidden LED display lights on. An easy-to-view display with a touch of decency from Samsung.



### Front Opening Air Inlet

Air inlet is located at the top part of the air conditioner to take warm air in. For efficient air intake, Samsung developed a front opening panel that opens about 10 degrees.

## Model Number

	Power Source (V/Hz/ $\phi$ )	Refrigerant	9k Btu	12k Btu	18k Btu	24k Btu
Inverter	220~240/50/1	R410a	AQV09VBA	AQV12VBA	AQV18VBA	AQV24VBA
Heat Pump	220~240/50/1	R410a	-	-	-	-
	220/60/1	R22	AQ09V*A	AQ12V*A	AQ18V*A	AQ24V*A
Cooling Only	220~240/50/1	R22	AS09V*A	AS12V*A	AS18V*A	AS24V*A
	220/60/1	R22	-	AS12V*A	AS18V*A	AS24V*A

## Features

### Micro Plasma Ion (Optional)

➡ P09

The world's first technology to generate active hydrogen atoms together with oxygen ions to clean the air.



### Good Morning Mode

➡ P13

An epoch-making temperature control program to keep optimum skin temperature while sleeping for falling asleep quickly and refreshing wake up.



### smart Inverter (Optional)

➡ P19

High efficiency inverter technology for faster cooling/heating, precise temperature control and energy saving.

\* Smart Inverter is an optional feature for selected regions only.

### Deodorizing Filter

➡ P17

Incorporated with activated carbon, the Deodorizing Filter efficiently adsorbs cigarette smoke, pet odors and other unpleasant odors.

### ANTI-allergy filter



➡ P17

Removes invisible dusts and bacteria to help you avert allergy problems associated with such allergens.

### Anti-Bacterial CROSS Fan

➡ P17

Molded with an antibacterial formula to suppress proliferation of molds and bacteria.

### Silver Coated Filter and Evaporator



➡ P17

The filter and the evaporator are coated with silver ions to give you fresher and healthier air.

### UTR PLUS™

➡ P21

Super strong compressor for extremely hot regions.

\* UTR Plus™ is an optional feature for selected regions only.

## Remote Controller and Outdoor Unit



Remote Controller



Inverter	-	9k Btu	-	18k Btu
	-	12k Btu	-	24k Btu
Non Inverter	9k Btu	12k Btu	18k Btu	24k Btu



VIVACE / Shadow Mirror

Shadow Mirror

Micro Plasma Ion (Option)

Good Morning Mode

VIVACE / Shadow Mirror Model 26

VIVACE Digital i Model

The Digital i watches your environment gently.  
A Premium Model with a Beautiful Ring.

Digital i Model

Front Opening Air Inlet

The cover of the air inlet opens like a window. For efficient air intake, Samsung a developed front opening panel that opens about 10 degrees.

Digital i

A stylish circular display placed at the center of the air conditioner. The Digital i keeps eye on the condition of the air in your room.

VIVACE / Digital i Model

Features

Micro Plasma Ion (Optional) ➡ P09

The world's first technology to generate active hydrogen atoms together with oxygen ions to clean the air.

Good Morning Mode ➡ P13

An epoch-making temperature control program to keep optimum skin temperature while sleeping for falling asleep quickly and refreshing wake up.

ANTI-allergy filter ONLY IN SAMSUNG ➡ P17

Removes invisible dusts and bacteria to help you avert allergy problems associated with such allergens.

Deodorizing Filter ➡ P17

Incorporated with activated carbon, the Deodorizing Filter efficiently adsorbs cigarette smoke, pet odors and other unpleasant odors.

Silver Coated Filter and Evaporator ONLY IN SAMSUNG ➡ P17

The filter and the evaporator are coated with silver ions to give you fresher and healthier air.

Anti-Bacterial **Cross** Fan ➡ P17

Molded with an antibacterial formula to suppress proliferation of molds and bacteria.

UTR PLUS™ ➡ P21

Super strong compressor for extremely hot regions.

\* UTR Plus™ is an optional feature for selected regions only.

Remote Controller and Outdoor Unit

Remote Controller

Non Inverter

12k Btu

18k Btu

24k Btu

	Power Source (V/Hz/ Φ)	Refrigerant	9k Btu	12k Btu	18k Btu	24k Btu
Inverter	220~240/50/1	R410a	AQV09VWA	AQV12VWA	AQV18VWA	AQV24VWA
Heat Pump	220~240/50/1	R410a	-	-	-	-
		R22	AQ09V*A	AQ12V*A	AQ18V*A	AQ24V*A
Cooling Only	220/60/1	R22	-	-	AQ18V*A	AQ24V*A
	220~240/50/1	R22	AS09V*A	AS12V*A	AS18V*A	AS24V*A
	220/60/1	R22	-	AS12V*A	AS18V*A	AS24V*A



Digital i

Micro Plasma Ion (Option)

Good Morning Mode

VIVACE / Digital I Model 30

TIFFANY

The beautiful wide and slim body design presents you a wide surrounding flow of cool air.

33 TIFFANY

Wide Slim Body

Beautiful figure of 1.2-meter wide slim body will change your image of an air conditioner. The wide air flow from the air conditioner will fill every corner of your room with cool air.

Digital i

A stylish circular display placed at the center of the air conditioner. The Digital i keeps eye on the condition of the air in your room.

Independent Blades

The blades that can be controlled independently enable you to control the air flow of each side separately. Enabling to meet various needs in the air flow.

Model Number

	Power Source (V/Hz/φ)	Refrigerant	9k Btu	12k Btu	18k Btu	24k Btu
Inverter	220~240/50/1	R410a	-	AQV12TA	-	-
Heat Pump	220~240/50/1	R22	-	AQ12TA	-	-

TIFFANY

Features

Micro Plasma Ion (Optional) ➡ P09

The world's first technology to generate active hydrogen atoms together with oxygen ions to clean the air.

Good Morning Mode ➡ P13

An epoch-making temperature control program to keep optimum skin temperature while sleeping for falling asleep quickly and refreshing wake up.

smart inverter (Optional) ➡ P19

High efficiency inverter technology for faster cooling/heating, precise temperature control and energy saving.

\* Smart Inverter is an optional feature for selected regions only.

Deodorizing Filter ➡ P17

Incorporated with activated carbon, the Deodorizing Filter efficiently adsorbs cigarette smoke, pet odors and other unpleasant odors.

ANTI-allergy filter ➡ P17

Removes invisible dusts and bacteria to help you avert allergy problems associated with such allergens.

Anti-Bacterial Fan ➡ P17

Molded with an antibacterial formula to suppress proliferation of molds and bacteria.

Silver Coated Filter and Evaporator ➡ P17

The filter and the evaporator are coated with silver ions to give you fresher and healthier air.

UTR ➡ P21

Super strong compressor for extremely hot regions.

\* UTR Plus™ is an optional feature for selected regions only.

Remote Controller and Outdoor Unit

<p>Remote Controller</p>	Inverter	-	12k Btu
	Non Inverter	12k Btu	-



TIFFANY

Wide and Slim Body

Micro Plasma Ion (Option)

Good Morning Mode

TIFFANY

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MODERATO

Simple, chic and slim body adds taste to your interior.

MODERATO

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Silver Model

White Model

Round Form

Hidden Display

Two-tone Color

Model Number

	Power Source (V/Hz/ϕ)	Refrigerant	9k Btu	12k Btu	18k Btu	24k Btu
Inverter	220~240/50/1	R410a	AQV09MSA	AQV12MSA	AQV18MSA	AQV24MSA
Heat Pump	220~240/50/1	R410a	AQO9MSB	AQ12MSB	AQ18MSB	AQ24MSB
	220/60/1	R22	AQ09M*	AQ12M*	AQ18M*	AQ24M*
Cooling Only	220~240/50/1	R22	-	AS12M*	AS18M*	AS24M*
	220/60/1	R22	-	AS12M*	AS18M*	AS24M*

MODERATO

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MODERATO

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Features

Micro Plasma Ion (Optional) ➡ P09

Good Morning Mode ➡ P13

smart inverter (Optional) ➡ P19

Deodorizing Filter ➡ P17

ANTI-allergy filter SAMSUNG ➡ P17

Anti-Bacterial CROSS Fan ➡ P17

Silver Coated Filter and Evaporator ➡ P17

UTR PLUS™ ➡ P21

Remote Controller and Outdoor Unit

Remote Controller

Inverter	-	9k Btu	-	18k Btu
Non Inverter	9k Btu	12k Btu	18k Btu	24k Btu

MODERATO

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Round Form

Micro Plasma Ion (Option)

Good Morning Mode

MODERATO 38

FORTE

Stylish Air Conditioner with Cool Flush Face.

MODERATO

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FORTE

Flush Front Panel

The flush front panel was realized by moving the front grille to the top of the air conditioner. Cleaning is so easy, simply wipe to recover the brand new look.

Accent Line

Blue line on the white body. The design resembles a refreshing blue sky. The simple design looks great with any interior.

Bottom Opening Front Panel

Simply lift the front panel to open the cover of the air conditioner. Just like the hood of a car, the cover goes up for easy cleaning of the filters.

Model Number

	Power Source (V/Hz/ϕ)	Refrigerant	7k Btu	9k Btu	12k Btu	18k Btu	24k Btu
Inverter	220~240/50/1	R410a	-	AQV09FA	AQV12FA	AQV18FA	AQV24FA
Heat Pump	220~240/50/1	R410a	-	AQ09FA	AQ12FA	AQ18FA	AQ24FA
		R22	AQ07XA	AQ09X(F)A	AQ12FA	AQ18FA	AQ24FA
Cooling Only	220/60/1	R22	-	-	AQ12FA	AQ18FA	AQ24FA
	220~240/50/1	R22	-	AS09FA	AS12FA	AS18FA	AS24FA
	220/60/1	R22	-	AS09FA	AS12FA	AS18FA	AS24FA

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FORTE

FORTE

Features

Good Morning Mode

An epoch-making temperature control program to keep optimum skin temperature while sleeping for falling asleep quickly and refreshing wake up.

⇒ P13

smart inverter

(Optional)

High efficiency inverter technology for faster cooling/heating, precise temperature control and energy saving.

\* Smart Inverter is an optional feature for selected regions only.

⇒ P19

Deodorizing Filter

Incorporated with activated carbon, the Deodorizing Filter efficiently adsorbs cigarette smoke, pet odors and other unpleasant odors.

⇒ P17

Anti-Bacterial FAN

Molded with an antibacterial formula to suppress proliferation of molds and bacteria.

⇒ P17

Silver Coated Filter and Evaporator

The filter and the evaporator are coated with silver ions to give you fresher and healthier air.

⇒ P17

UTR PLUS

Super strong compressor for extremely hot regions.

\* UTR Plus™ is an optional feature for selected regions only.

⇒ P21

Easy Detachable and Washable Grille

Newly designed grilles can be easily detached from the indoor unit for regular cleaning.

Catechine Filter

Easy Handle for Convenience During Transporting, Unloading etc.

Remote Controller and Outdoor Unit

Remote Controller

	7k Btu	9k Btu	12k Btu	18k Btu	24k Btu
Inverter			9k Btu		18k Btu
			12k Btu		24k Btu
Non Inverter	7k Btu	9k Btu	12k Btu	18k Btu	24k Btu

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FORTE





Flush Front Panel

Good Morning Mode

Smart Inverter (Option)



FORTE



			Smart Inverter	Smart Inverter	Smart Inverter	Smart Inverter
Refrigerant Type			R410a	R410a	R410a	R410a
Power Source			220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1
Model Code			AQV09VBA	AQV12VBA	AQV18VBA	AQV24VBA
Performance						
Capacity	Cooling	Btu/hr.	8,530	11,942	17,061	23,203
		Cal/hr.	2,150	3,009	4,299	5,847
		kW	2.5	3.5	5.0	6.8
	Heating	Btu/hr.	11,942	13,649	20,473	27,297
		Cal/hr.	3,009	3,439	5,159	6,879
		kW	3.5	4.0	6.0	8.0
Energy Efficiency	Cooling	EER (Btu/W)	14.0	11.6	11.0	10.3
	Heating	EER (W/W)	4.10	3.40	3.23	3.01
		COP (W/W)	4.10	3.64	3.41	2.81
Moisture Removal		ℓ /hr.	1.0	1.4	2.5	3.0
Air Circulation (Max)		m³/min	8.0	9.0	13.0	15.0
Noise Level	Indoor High/Low	dB	31/21	35 / 21	40 / 30	41 / 30
	Outdoor High	dB	45	45	54	56
Electrical Data						
Power Consumption	Cooling	W	610	1030	1548	2260
	Heating	W	850	1099	1760	2850
Operating Current	Cooling	A	3.0	5.0	7.0	10.6
	Heating	A	4.1	5.3	8.0	13
Dimension & Loading Q'ty						
Net Dimension (WxHxD)	Indoor	mm	825x285x189	825x285x189	1065x298x218	1065x298x218
	Outdoor	mm	720x548x265	720x548x265	880x638x310	880x638x310
Net Weight	Indoor	kg	9	9	13	13
	Outdoor	kg	33.5	33.5	51	51
Shipping Weight	Indoor	kg	11	11	16	16
	Outdoor	kg	35	35	53	53
Loading Q'ty	W Pipe	20/40ft/Jumbo	96/205/233	96/205/233	61/128/150	61/128/150
	W/O Pipe	20/40ft/Jumbo	106/231/259	106/231/259	66/138/153	66/138/153
Technical Information						
SVC Valve	Liquid	ODxL	φ 6.35mmx5m	φ 6.35mmx5m	φ 6.35mmx5m	φ 6.35mmx5m
	Gas	ODxL	φ 9.52mmx5m	φ 9.52mmx5m	φ 12.7mmx5m	φ 15.88mmx5m
Piping Length	STD	m	5	5	5	5
	Max	m	15	15	30	30
Piping Height	Max	m	8	8	15	15
Refrigerant		G				
Add Refrigerant		g/m				
Features						
MPI			●	●	●	●
Good Morning			●	●	●	●
Silver Nano Health System	Silver Coated Filter		●	●	●	●
	Silver Coated Evaporator		●	●	●	●
Pure & Clean Air	Deodorizing Filter		●	●	●	●
	Pure Filter (HAF Filter)		●	●	●	●
	Catechin Filter					
	Allergy Filter		●	●	●	●
Operating Mode	Digital I Plus					
	Dehumidification		●	●	●	●
	Turbo Mode		●	●	●	●
	Sleep Mode		●	●	●	●
	Timer		●	●	●	●
	Energy Saving Mode		●	●	●	●
	Auto Restart		●	●	●	●
	Auto Changeover		●	●	●	●
Convenience	Surrounding Air Control					
	Auto Wind		●	●	●	●
	Air Flow Control Steps (Cool/Fan)		4/3	4/3	4/3	4/3
	Air Direction Control (Up/Down)		Auto	Auto	Auto	Auto
	Air Direction Control (Left/Right)		Manual	Manual	Manual	Manual
	Auto Grille		●	●	●	●
	Remote Controller		●	●	●	●
	Auto Clean (self cleaning)		●	●	●	●
Compressor Type			Rotary	Rotary	Rotary	Twin
Etc.	Cooling	°C	-10~43	-10~43	-10~43	-10~43
Low Ambient	Heating	°C	-15~24	-15~24	-15~24	-15~24

			CO	CO	CO	CO
Refrigerant Type			R22	R22	R22	R22
Power Source			220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1
Model Code			AS09V*A	AS12V*A	AS18V*A	AS24V*A
Performance						
Capacity	Cooling	Btu/hr.	9,000	12,000	18,000	24,000
		Cal/hr.	2,322	3,009	4,385	5,847
		kW	2.7	3.5	5.1	6.8
	Heating	Btu/hr.	-	-	-	-
		Cal/hr.	-	-	-	-
		kW	-	-	-	-
Energy Efficiency	Cooling	EER (Btu/W)	9.57	9.60	9.47	9.23
	Heating	EER (W/W)	2.81	2.81	2.78	2.71
		COP (W/W)	-	-	-	-
Moisture Removal		ℓ /hr.	1	1.3	1.9	2.6
Air Circulation (Max)		m³/min	8	9	15	17
Noise Level	Indoor High/Low	dB	31 / 22	36 / 26	40 / 32	42 / 35
	Outdoor High	dB	46	46	52	55
Electrical Data						
Power Consumption	Cooling	W	940	1250	1900	2600
	Heating	W	-	-	-	-
Operating Current	Cooling	A	4.2	5.6	9	12.5
	Heating	A	-	-	-	-
Dimension & Loading Q'ty						
Net Dimension (WxHxD)	Indoor	mm	825x285x189	825x285x189	1065x298x214	1065x298x214
	Outdoor	mm	660x470x240	720x548x265	790x548x285	880x638x310
Net Weight	Indoor	kg	9	9	13	13
	Outdoor	kg	26	31	39	56
Shipping Weight	Indoor	kg	11	11	16	16
	Outdoor	kg	27.5	33	43	58
Loading Q'ty	W Pipe	20/40ft/Jumbo	116/240/273	96/205/233	82/170/197	61/128/150
	W/O Pipe	20/40ft/Jumbo	136/280/300	106/222/252	82/170/197	61/128/150
Technical Information						
SVC Valve	Liquid	ODxL	φ 6.35mmx5.0m	φ 6.35mmx5.0m	φ 6.35mmx5.0m	φ 6.35mmx5.0m
	Gas	ODxL	φ 9.52mmx5.0m	φ 12.7mmx5.0m	φ 12.7mmx5.0m	φ 15.88mmx5.0m
Piping Length	STD	m	5	5	5	5
	Max	m	15	15	15	20
Piping Height	Max	m	7	7	8	8
Refrigerant		G				
Add Refrigerant		g/m				
Features						
MPI			●	●	●	●
Good Morning			●	●	●	●
Silver Nano Health System	Silver Coated Filter		●	●	●	●
	Silver Coated Evaporator		●	●	●	●
	Deodorizing Filter		●	●	●	●
Pure & Clean Air	Pure Filter (HAF Filter)					
	Catechin Filter					
	Allergy Filter		●	●	●	●
Operating Mode	Digital I Plus		Optional	Optional	Optional	Optional
	Dehumidification		●	●	●	●
	Turbo Mode		●	●	●	●
	Sleep Mode		●	●	●	●
	Timer		●	●	●	●
	Energy Saving Mode		●	●	●	●
	Auto Restart		●	●	●	●
	Auto Changeover		●	●	●	●
Convenience	Surrounding Air Control					
	Auto Wind		●	●	●	●
	Air Flow Control Steps (Cool/Fan)		4/3	4/3	4/3	4/3
	Air Direction Control (Up/Down)		Auto	Auto	Auto	Auto
	Air Direction Control (Left/Right)		Manual	Manual	Manual	Manual
	Auto Grille		●	●	●	●
	Remote Controller		●	●	●	●
	Auto Clean (self cleaning)		●	●	●	●
Etc.	Compressor Type		Rotary	Rotary	Rotary	Rotary
Low Ambient	Cooling	°C				
	Heating	°C				

Specifications of the real product can be different from the above.





TIFFANY

			Smart Inverter	HP	
Refrigerant Type			R410a	R22	
Power Source			220~240/50/1	220~240/50/1	
Model Code			AQV12TA	AQ12TA	
Performance					
Capacity	Cooling	Btu/hr.	11,944	11,944	
		Cal/hr.	3,010	3,010	
		kW	3.5	3.5	
	Heating	Btu/hr.	13,650	12,968	
		Cal/hr.	3,440	3,268	
		kW	4.0	3.8	
Energy Efficiency	Cooling	EER (Btu/W)	11.6	10.2	
		EER (W/W)	3.40	3.0	
	Heating	COP (W/W)	3.61	3.2	
Moisture Removal		ℓ /hr.	1.7	1.4	
Air Circulation (Max)		m³/min	9	9	
Noise Level	Indoor High/Low	dB	35 / 21	36 / 26	
	Outdoor High	dB	45	46	
Electrical Data					
Power Consumption	Cooling	W	1030	1170	
	Heating	W	1105	1180	
Operating Current	Cooling	A	5	5.2	
	Heating	A	5.3	5.3	
Dimension & Loading Q'ty					
Net Dimension (WxHxD)	Indoor	mm	1185x220x199	1185x220x199	
	Outdoor	mm	790x548x285	720x530x260	
Net Weight	Indoor	kg	10.5	10.5	
	Outdoor	kg	35.5	30.5	
Shipping Weight	Indoor	kg	12.5	12.5	
	Outdoor	kg	38	32.5	
Loading Q'ty	W Pipe	20/40ft/Jumbo	84/180/202	94/194/218	
	W/O Pipe	20/40ft/Jumbo	92/192/215	104/212/236	
Technical Information					
SVC Valve	Liquid	ODxL	φ 3/8"x7.5m	φ 1/2"x5m	
	Gas	ODxL	φ 1/4"x7.5m	φ 1/4"x5m	
Piping Length	STD	m	7.5	5	
	Max	m	15	15	
Piping Height	Max	m	8	7	
Refrigerant		G	1000	900	
Add Refrigerant		g/m	Chargeless	20	
Features					
MPI			●	●	
Good Morning			●	●	
Silver Nano Health System	Silver Coated Filter				
	Silver Coated Evaporator		●	●	
	Deodorizing Filter		●	●	
Pure & Clean Air	Pure Filter (HAF Filter)				
	Catechin Filter				
	Allergy Filter		●	●	
Operating Mode	Digital i Plus		●	●	
	Dehumidification		●	●	
	Turbo Mode		●	●	
	Sleep Mode		●	●	
	Timer		●	●	
	Energy Saving Mode		●	●	
	Auto Restart		●	●	
	Auto Changeover		●	●	
Convenience	Surrounding Air Control		●	●	
	Auto Wind		●	●	
	Air Flow Control Steps (Cool/Fan)		●	●	
	Air Direction Control (Up/Down)		●	●	
	Air Direction Control (Left/Right)		-	-	
	Auto Grille		●	●	
	Remote Controller		●	●	
	Auto Clean (self cleaning)		●	●	
Compressor Type			Rotary	Rotary	
Etc.	Cooling	°C	-10		
	Heating	°C	-15		

Specifications of the real product can be different from the above.



MODERATO

			Smart Inverter	Smart Inverter	Smart Inverter	Smart Inverter
Refrigerant Type			R410a	R410a	R410a	R410a
Power Source			220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1
Model Code			AQV09MSA	AQV12MSA	AQV18MSA	AQV24MSA
Performance						
Capacity	Cooling	Btu/hr.	8,530	11,942	17,061	23,203
		Cal/hr.	2,150	3,009	4,299	5,847
		kW	2.5	3.5	5.0	6.8
	Heating	Btu/hr.	11,942	13,649	20,473	27,297
		Cal/hr.	3,009	3,439	5,159	6,879
		kW	3.5	4.0	6.0	8.0
Energy Efficiency	Cooling	EER (Btu/W)	13.1	11.3	11.0	10.3
		EER (W/W)	3.85	3.30	3.21	3.01
	Heating	COP (W/W)	3.65	3.62	3.41	2.81
Moisture Removal		ℓ /hr.	1.0	1.4	2.5	3.0
Air Circulation (Max)		m³/min	7.5	8.5	13.0	15.0
Noise Level	Indoor High/Low	dB	31 / 22	36 / 22	40 / 30	41 / 30
	Outdoor High	dB	45	45	54	56
Electrical Data						
Power Consumption	Cooling	W	650	1060	1560	2260
	Heating	W	960	1105	1760	2850
Operating Current	Cooling	A	3.1	5.1	7.0	10.6
	Heating	A	4.6	5.3	8.0	13
Dimension & Loading Q'ty						
Net Dimension (WxHxD)	Indoor	mm	950x268x175	950x268x175	1099x315x216	1099x315x216
	Outdoor	mm	720x548x265	720x548x265	880x638x310	880x638x310
Net Weight	Indoor	kg	9	9	13	13
	Outdoor	kg	33.5	33.5	51	51
Shipping Weight	Indoor	kg	11	11	16	16
	Outdoor	kg	35	35	53	53
Loading Q'ty	W Pipe	20/40ft/Jumbo	95/201/222	95/201/222	61/126/138	61/126/138
	W/O Pipe	20/40ft/Jumbo	100/211/243	100/211/243	61/126/138	61/126/138
Technical Information						
SVC Valve	Liquid	ODxL	φ 6.35mmx5m	φ 6.35mmx5m	φ 6.35mmx5m	φ 6.35mmx5m
	Gas	ODxL	φ 9.52mmx5m	φ 9.52mmx5m	φ 12.7mmx5m	φ 15.88mmx5m
Piping Length	STD	m	5	5	5	5
	Max	m	15	15	30	30
Piping Height	Max	m	8	8	15	15
Refrigerant		G				
Add Refrigerant		g/m				
Features						
MPI			●	●	●	●
Good Morning			●	●	●	●
Silver Nano Health System	Silver Coated Filter		●	●	●	●
	Silver Coated Evaporator		●	●	●	●
	Deodorizing Filter		●	●	●	●
Pure & Clean Air	Pure Filter (HAF Filter)					
	Catechin Filter		●	●	●	●
	Allergy Filter					
Operating Mode	Digital i Plus		●	●	●	●
	Dehumidification		●	●	●	●
	Turbo Mode		●	●	●	●
	Sleep Mode		●	●	●	●
	Timer		●	●	●	●
	Energy Saving Mode		●	●	●	●
	Auto Restart		●	●	●	●
	Auto Changeover		●	●	●	●
Convenience	Surrounding Air Control		●	●	●	●
	Auto Wind		●	●	●	●
	Air Flow Control Steps (Cool/Fan)		4/3	4/3	4/3	4/3
	Air Direction Control (Up/Down)		Auto	Auto	Auto	Auto
	Air Direction Control (Left/Right)		Manual	Manual	Manual	Manual
	Auto Grille					
	Remote Controller		●	●	●	●
	Auto Clean (self cleaning)		●	●	●	●
Compressor Type			Rotary	Rotary	Rotary	Twin
Etc.	Cooling	°C	-10~43	-10~43	-10~43	-10~43
	Heating	°C	-15~24	-15~24	-15~24	-15~24

Specifications of the real product can be different from the above.





			HP	HP	HP	HP
Refrigerant Type			R410a	R410a	R410a	R410a
Power Source			V/Hz/ ϕ	220~240/50/1	220~240/50/1	220~240/50/1
Model Code			AQ09MSB	AQ12MSB	AQ18MSB	AQ24MSB
Performance						
Capacity	Cooling	Btu/hr.	9,000	12,000	18,000	24,000
		Cal/hr.	2,322	3,095	4,471	5,847
		kW	2.7	3.6	5.2	6.8
	Heating	Btu/hr.	10,000	13,000	20,000	24,000
		Cal/hr.	2,494	3,267	4,987	6,019
		kW	2.9	3.8	5.8	7.0
Energy Efficiency	Cooling	EER (Btu/W)	11.0	11.0	9.6	9.6
		EER (W/W)	3.23	3.23	2.81	2.81
	Heating	COP (W/W)	3.44	3.22	3.22	2.81
Moisture Removal			ℓ /hr.	1.0	1.3	1.9
Air Circulation (Max)			m³/min	8	9	15
Noise Level	Indoor High/Low	dB	31 / 22	36 / 26	40 / 32	42 / 35
	Outdoor High	dB	45	45	52	55
Electrical Data						
Power Consumption	Cooling	W	836	1115	1850	2420
	Heating	W	843	1180	1800	2490
Operating Current	Cooling	A	3.9	5	8.4	10.8
	Heating	A	3.7	5.3	8.2	11.2
Dimension & Loading Q'ty						
Net Dimension (WxHxD)	Indoor	mm	950x268x178	950x268x178	1099x315x217	1099x315x217
	Outdoor	mm	720x548x265	720x548x265	790x548x285	880x638x310
Net Weight	Indoor	kg	9	9	13	13
	Outdoor	kg	33.5	33.5	39.5	54.5
Shipping Weight	Indoor	kg	11	11	16	16
	Outdoor	kg	35	35	42	58
Loading Q'ty	W Pipe	20/40ft/Jumbo	95/201/222	95/201/222	78/157/184	61/126/138
	W/O Pipe	20/40ft/Jumbo	100/211/243	100/211/243	78/157/184	61/126/138
Technical Information						
SVC Valve	Liquid	ODxL	ϕ 6.35mmx5m	ϕ 6.35mmx5m	ϕ 6.35mmx5m	ϕ 6.35mmx5m
	Gas	ODxL	ϕ 9.52mmx5m	ϕ 12.7mmx5m	ϕ 12.7mmx5m	ϕ 15.88mmx5m
Piping Length	STD	m	5	5	5	5
	Max	m	15	15	15	20
Piping Height	Max	m	7	7	8	8
Refrigerant			G			
Add Refrigerant			g/m			
Features						
MPI						
Good Morning			●	●	●	●
Silver Nano Health System	Silver Coated Filter		●	●	●	●
	Silver Coated Evaporator		●	●	●	●
	Deodorizing Filter		●	●	●	●
Pure & Clean Air	Pure Filter (HAF Filter)					
	Catechin Filter		●	●	●	●
	Allergy Filter					
Operating Mode	Digital i Plus					
	Dehumidification		●	●	●	●
	Turbo Mode		●	●	●	●
	Sleep Mode		●	●	●	●
	Timer		●	●	●	●
	Energy Saving Mode		●	●	●	●
	Auto Restart		●	●	●	●
	Auto Changeover		●	●	●	●
Convenience	Surrounding Air Control					
	Auto Wind		●	●	●	●
	Air Flow Control Steps (Cool/Fan)		4/3	4/3	4/3	4/3
	Air Direction Control (Up/Down)		Auto	Auto	Auto	Auto
	Air Direction Control (Left/Right)		Manual	Manual	Manual	Manual
	Auto Grille					
	Remote Controller		●	●	●	●
	Auto Clean (self cleaning)		●	●	●	●
Etc.	Compressor Type		Rotary	Rotary	Rotary	Rotary
	Cooling	°C				
	Heating	°C				

CO	CO	CO	HP	HP	HP	HP
R22	R22	R22	R22	R22	R22	R22
220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1
AS12M*	AS18M*	AS24M*	AQ09M*	AQ12M*	AQ18M*	AQ24M*
12,000	18,000	24,000	9,000	12,000	18,000	24,000
3,009	4,385	5,847	2,322	3,095	4,471	5,847
3.5	5.1	6.8	2.7	3.6	5.2	6.8
-	-	-	10,000	13,000	20,000	24,000
-	-	-	2,494	3,267	4,987	6,019
-	-	-	2.9	3.8	5.8	7.0
10.0	9.5	9.2	9.6	10.0	9.5	9.2
2.93	2.78	2.71	2.81	2.93	2.78	2.71
-	-	-	3.33	3.23	3.13	2.71
1.3	1.9	2.6	1.0	1.3	1.9	2.6
9	15	17	8	9	15	17
36 / 26	40 / 32	42 / 35	31 / 22	36 / 26	40 / 32	42 / 35
45	52	55	45	45	52	55
1200	1900	2600	940	1200	1900	2600
-	-	-	880	1180	1870	2600
5.3	9	12.5	4.2	5.3	9	12.5
-	-	-	3.9	5.2	9	12.5
950x268x178	1099x315x200	1099x315x200	950x268x178	950x268x178	1099x315x217	1099x315x217
720x548x265	790x548x285	880x638x310	660x470x240	790x548x285	790x548x285	880x638x310
9	13	13	9	9	13	13
33.8	39	56	33.5	33.5	39.5	54.5
11	16	16	11	11	16	16
35.6	43	58	35	35	42	58
95/201/222	78/157/184	61/126/138	120/248/280	95/201/222	78/157/184	61/126/138
100/211/243	78/157/184	61/126/138	128/264/305	100/211/243	78/157/184	61/126/138
ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5m	ϕ 6.35mmx5m	ϕ 6.35mmx5m	ϕ 6.35mmx5m
ϕ 12.7mmx5.0m	ϕ 12.7mmx5.0m	ϕ 15.88mmx5.0m	ϕ 9.52mmx5m	ϕ 12.7mmx5m	ϕ 12.7mmx5m	ϕ 15.88mmx5m
5	5	5	5	5	5	5
15	15	20	15	15	15	20
7	8	8	7	7	8	8
Optional	Optional	Optional	Optional	Optional	Optional	Optional
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
4/3	4/3	4/3	4/3	4/3	4/3	4/3
Auto	Auto	Auto	Auto	Auto	Auto	Auto
Manual	Manual	Manual	Manual	Manual	Manual	Manual
●	●	●				
●	●	●	●	●	●	●
●	●	●	●	●	●	●
Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary

Specifications of the real product can be different from the above.





HP	HP
R22	R22
220/60/1	220/60/1
AQ18M*	AQ24M*
18,000	24,000
3,750	5,000
5.1	6.8
20,000	24,000
4,800	6,000
5.80	7.00
9.7	9.6
2.84	2.81
3.25	2.81
1.9	2.6
15	17
40 / 32	42 / 35
52	55
1856	2500
1802	2500
9	12
9	12
1099x315x200	1099x315x200
790x548x285	880x638x310
13	13
39	56
16	16
43	58
78/157/184	61/126/138
78/157/184	61/126/138
φ 6.35mmx5.0m	φ 6.35mmx5.0m
φ 12.7mmx5.0m	φ 15.88mmx5.0m
5	5
15	20
8	8
Optional	Optional
●	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●
4/3	4/3
Auto	Auto
Manual	Manual
●	●
●	●
●	●
Rotary	Rotary

## 51 Specifications





			Smart Inverter	Smart Inverter	Smart Inverter	Smart Inverter
Refrigerant Type			R410a	R410a	R410a	R410a
Power Source			V/Hz/ ϕ	220~240/50/1	220~240/50/1	220~240/50/1
Model Code			AQV09FA	AQV12FA	AQV18FA	AQV24FA
Performance						
Capacity	Cooling	Btu/hr.	8,530	11,260	17,061	23,203
		Cal/hr.	2,150	2,837	4,299	5,847
		kW	2.5 (0.99~3.3)	3.3 (0.99~4.0)	5.0 (1.6~6.0)	6.8 (2.2~8.0)
	Heating	Btu/hr.	11,260	13,649	20,473	27,297
		Cal/hr.	2,837	3,439	5,159	6,879
		kW	3.3 (1.2~4.5)	4.0 (1.4~5.0)	6.0 (1.5~7.7)	8.0 (1.9~10.0)
Energy Efficiency	Cooling	EER (Btu/W)	11.6	11.0	11.1	10.3
		EER (W/W)	3.40	3.21	3.24	3.01
	Heating	COP (W/W)	3.63	3.61	3.41	2.81
Moisture Removal			ℓ /hr.	1.0	1.4	2.5
Air Circulation (Max)			m³/min	7.0	8.0	13.0
Noise Level	Indoor High/Low	dB	33 / 23	36 / 23	40 / 30	41 / 30
	Outdoor High	dB	45	47	54	56
Electrical Data						
Power Consumption	Cooling	W	735	1028	1543	2260
	Heating	W	910	1108	1760	2850
Operating Current	Cooling	A	3.6	5.0	7.0	10.6
	Heating	A	4.4	5.3	8.0	13
Dimension & Loading Q'ty						
Net Dimension (WxHxD)	Indoor	mm	825x285x189	825x285x189	1065x298x218	1065x298x218
	Outdoor	mm	720x548x265	720x548x265	880x638x310	880x638x310
Net Weight	Indoor	kg	9	9	13	13
	Outdoor	kg	31.5	31.5	51	51
Shipping Weight	Indoor	kg	11	11	16	16
	Outdoor	kg	33	33	53	53
Loading Q'ty	W Pipe	20/40ft/Jumbo	96/205/233	96/205/233	61/128/150	61/128/150
	W/O Pipe	20/40ft/Jumbo	106/231/259	106/231/259	66/138/153	66/138/153
Technical Information						
SVC Valve	Liquid	ODxL	ϕ 6.35mmx5m	ϕ 6.35mmx5m	ϕ 6.35mmx5m	ϕ 6.35mmx5m
	Gas	ODxL	ϕ 9.52mmx5m	ϕ 9.52mmx5m	ϕ 12.7mmx5m	ϕ 15.88mmx5m
Piping Length	STD	m	5	5	5	5
	Max	m	15	15	30	30
Piping Height	Max	m	7	7	15	15
Refrigerant		G	750	850	1450	1450
Add Refrigerant		g/m	15	15	15	15
Features						
MPI						
Good Morning			●	●	●	●
Silver Nano Health System	Silver Coated Filter		●	●	●	●
	Silver Coated Evaporator		●	●	●	●
	Deodorizing Filter		●	●	●	●
Pure & Clean Air	Pure Filter (HAF Filter)					
	Catechin Filter		●	●	●	●
	Allergy Filter					
Operating Mode	Digital I Plus					
	Dehumidification		●	●	●	●
	Turbo Mode		●	●	●	●
	Sleep Mode		●	●	●	●
	Timer		●	●	●	●
	Energy Saving Mode					
	Auto Restart		●	●	●	●
	Auto Changeover		●	●	●	●
Convenience	Surrounding Air Control					
	Auto Wind		●	●	●	●
	Air Flow Control Steps (Cool/Fan)		5/3	5/3	5/3	5/3
	Air Direction Control (Up/Down)		Auto	Auto	Auto	Auto
	Air Direction Control (Left/Right)		Manual	Manual	Manual	Manual
	Auto Grille		●	●	●	●
	Remote Controller		●	●	●	●
	Auto Clean (self cleaning)					
Etc.	Compressor Type		Rotary	Rotary	Rotary	Twin
Low Ambient	Cooling	°C	+10~43	+10~43	-10~43	-10~43
	Heating	°C	-10~24	-10~24	-15~24	-15~24

HP	HP	HP	HP	CO	CO	CO
R410a	R410a	R410a	R410a	R22	R22	R22
220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1
AQ09FA	AQ12FA	AQ18FA	AQ24FA	AS09FA	AS12FA	AS18FA
9,384	11,944	17,404	23,205	9,000	12,000	18,000
2,365	3,010	4,386	5,848	2,268	3,024	4,536
2.75	3.5	5.1	6.8	2.64	3.50	5.10
9,896	12,968	19,793	23,888	-	-	-
2,494	3,268	4,988	6,020	-	-	-
2.9	3.8	5.8	7	-	-	-
9.6	9.6	9.6	9.6	9.28	10.00	9.47
2.81	2.82	2.82	2.81	2.72	2.93	2.78
3.22	3.22	3.22	2.81	-	-	-
1.0	1.5	1.8	2.4	1	1.5	1.8
7.5	8.0	13.0	14.5	7.5	8	13
32 / 24	36 / 26	40 / 32	42 / 35	32 / 24	36 / 26	40 / 32
46	47	52	55	46	47	52
980	1240	1810	2420	970	1200	1900
900	1180	1800	2490	-	-	-
4.5	5.7	8.3	10.8	4.3	5.3	9.5
4.5	5.3	8.0	11.2	-	-	-
825x285x189	825x285x189	1065x298x218	1065x298x218	825x285x189	825x285x189	825x285x189
660x475x242	720x548x265	790x548x285	880x638x310	660x475x242	720x548x265	790x548x285
7.8	8.4	11.0	13.0	7.8	8.4	9
26	33.8	39.0	56.0	26	33.8	39
12	12	16	16	9.8	10.4	11
28	35.8	41	58	28	35.8	41
116/240/273	96/205/233	82/170/197	61/128/150	116/240/273	96/205/233	82/170/197
136/280/303	106/231/259	82/170/197	66/138/153	136/280/303	106/231/259	82/170/197
ϕ 6.35mmx7.5m	ϕ 6.35mmx7.5m	ϕ 6.35mmx7.5m	ϕ 6.35mmx7.5m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m
ϕ 9.52mmx7.5m	ϕ 12.7mmx7.5m	ϕ 12.7mmx7.5m	ϕ 15.9mmx7.5m	ϕ 9.52mmx5.0m	ϕ 12.7mmx5.0m	ϕ 15.8mmx5.0m
7.5	7.5	7.5	7.5	5	5	5
15	15	15	20	15	15	15
7	7	8	8	7	7	8
680	950	1210	1500	650	870	1030
20	20	30	40	20	20	30
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
4/3	4/3	4/3	4/3	4/3	4/3	4/3
Auto	Auto	Auto	Auto	Auto	Auto	Auto
Manual	Manual	Manual	Manual	Manual	Manual	Manual
●	●	●	●	●	●	●
●	●	●	●	●	●	●
Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary

Specifications of the real product can be different from the above.



FORTE

			CO	HP	HP	HP
Refrigerant Type			R22	R22	R22	R22
Power Source			V/Hz/ ϕ	220~240/50/1	220/50/1	220~240/50/1
Model Code			AS24FA	AQ07XA	AQ09XA	AQ09FA
Performance						
Capacity	Cooling	Btu/hr.	24,000	7,000	9,000	9,000
		Cal/hr.	6,048	1,764	2,268	2,268
		kW	6.80	2.05	2.64	2.64
	Heating	Btu/hr.	-	7,500	10,000	10,000
		Cal/hr.	-	1,890	2,520	2,520
		kW	-	2.20	2.93	2.93
Energy Efficiency	Cooling	EER (Btu/W)	9.60	10.29	9.28	9.28
		EER (W/W)	2.81	3.02	2.72	2.72
	Heating	COP (W/W)	-	3.38	3.26	3.26
Moisture Removal		ℓ /hr.	2.4			1.0
Air Circulation (Max)		m³/min	14.5	5.5	7.5	7.5
Noise Level	Indoor High/Low	dB	42 / 35	32/29/24	36/32/26	32 / 24
	Outdoor High	dB	55	45	48	46
Electrical Data						
Power Consumption	Cooling	W	2500	680	970	970
	Heating	W	-	650	900	900
Operating Current	Cooling	A	12	3.0	4.3	4.3
	Heating	A	-	2.8	4.0	4.0
Dimension & Loading Q'ty						
Net Dimension (WxHxD)	Indoor	mm	1065x298x218	728x255x170	728x255x184	825x285x189
	Outdoor	mm	880x638x310	660x470x240	660x470x240	660x475x242
Net Weight	Indoor	kg	13	7	7.5	7.8
	Outdoor	kg	56	23.5	25.0	26
Shipping Weight	Indoor	kg	15	8	8.5	9.8
	Outdoor	kg	58	25.5	27	28
Loading Q'ty	W Pipe	20/40ft/Jumbo	61/128/150	134/278/316	128/276/304	116/240/273
	W/O Pipe	20/40ft/Jumbo	66/138/153	144/304/345	142/299/336	136/280/303
Technical Information						
SVC Valve	Liquid	ODxL	ϕ 6.35mmx5.0m	ϕ 6.35mmx5m	ϕ 6.35mmx5m	ϕ 6.35mmx5.0m
	Gas	ODxL	ϕ 15.8mmx5.0m	ϕ 9.52mmx5m	ϕ 9.52mmx5m	ϕ 9.52mmx5.0m
Piping Length	STD	m	5	5	5	5
	Max	m	20	15	15	15
Piping Height	Max	m	8	7	7	7
Refrigerant		G	1450	510		650
Add Refrigerant		g/m	40	20	20	20
Features						
MPI						
Good Morning			●	●	●	●
Silver Nano Health System	Silver Coated Filter		●	●	●	●
	Silver Coated Evaporator		●	●	●	●
	Deodorizing Filter		●	●	●	●
Pure & Clean Air	Pure Filter (HAF Filter)					
	Catechin Filter		●	●	●	●
	Allergy Filter					
Operating Mode	Digital i Plus					
	Dehumidification		●	●	●	●
	Turbo Mode		●	●	●	●
	Sleep Mode		●	●	●	●
	Timer		●	●	●	●
	Energy Saving Mode					
	Auto Restart		●	●	●	●
	Auto Changeover					
Convenience	Surrounding Air Control					
	Auto Wind		●	●	●	●
	Air Flow Control Steps (Cool/Fan)		4/3	4/3	4/3	4/3
	Air Direction Control (Up/Down)		Auto	Auto	Auto	Auto
	Air Direction Control (Left/Right)		Manual	Manual	Manual	Manual
	Auto Grille		●	●	●	●
	Remote Controller		●	●	●	●
	Auto Clean (self cleaning)					
Etc.	Compressor Type		Rotary	Rotary	Rotary	Rotary
	Cooling	°C				
	Heating	°C				

HP	HP	HP	CO	CO	CO	CO
R22	R22	R22	R22	R22	R22	R22
220~240/50/1	220~240/50/1	220~240/50/1	220/60/1	220/60/1	220/60/1	220/60/1
AQ12FA	AQ18FA	AQ24FA	AS09FA	AS12FA	AS18FA	AS24FA
12,000	18,000	24,000	9,000	12,000	18,000	24,000
3,024	4,536	6,048	2,268	3,024	4,536	6,048
3.52	5.28	7.04	2.64	3.52	5.10	6.80
13,000	20,000	24,000	-	-	-	-
3,276	5,040	6,048	-	-	-	-
3.81	5.87	7.04	-	-	-	-
10.00	9.47	9.60	9.28	8.28	9.47	9.60
2.93	2.78	2.81	2.72	2.43	2.78	2.81
3.23	3.09	2.65	-	-	-	-
1.5	1.8	2.4	1.0	1.5	1.8	2.4
8.0	13.0	14.5	7.5	8.0	13.0	14.5
36 / 26	40 / 32	42 / 35	32 / 24	36 / 26	40 / 32	42 / 35
47	52	55	46	47	52	55
1200	1900	2500	970	1450	1900	2500
1180	1900	2650	-	-	-	-
5.3	9.5	12.0	4.3	6.8	8.8	11.5
5.2	9.0	11.8	-	-	-	-
825x285x189	1065x298x218	1065x298x218	825x285x189	825x285x189	1065x298x218	1065x298x218
720x548x265	790x548x285	880x638x310	660x475x242	660x475x242	790x548x285	880x638x310
8.4	11	13	7.8	8.4	11	13
33.8	39.0	56.0	26	29	39.0	56.0
10.4	13	15	9.8	10.4	11	15
35.8	41	58	28	31	41	58
96/205/233	82/170/197	61/128/150	116/240/273	96/205/233	82/170/197	61/128/150
106/231/259	82/170/197	66/138/153	136/280/303	106/231/259	82/170/197	66/138/153
ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m	ϕ 6.35mmx5.0m
ϕ 12.7mmx5.0m	ϕ 15.8mmx5.0m	ϕ 15.8mmx5.0m	ϕ 9.52mmx5.0m	ϕ 12.7mmx5.0m	ϕ 15.8mmx5.0m	ϕ 15.8mmx5.0m
5	5	5	5	5	5	5
15	15	20	15	15	15	20
7	8	8	7	7	8	8
870	1030	1450	610	680	1150	1420
20	30	40	20	20	30	40
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
4/3	4/3	4/3	4/3	4/3	4/3	4/3
Auto	Auto	Auto	Auto	Auto	Auto	Auto
Manual	Manual	Manual	Manual	Manual	Manual	Manual
●	●	●			●	●
●	●	●	Compact	Compact	●	●
Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary

Specifications of the real product can be different from the above.





**FORTE** 

## MEMO

Refrigerant Type			HP	HP	HP	
Power Source			R22	R22	R22	
Model Code			220/60/1	220/60/1	220/60/1	
Performance			AQ12FA	AQ18FA	AQ24FA	
Capacity	Cooling	Btu/hr.	12000	18,000	24,000	
		Cal/hr.	3,024	4,536	6,048	
		kW	3.52	5.10	6.80	
	Heating	Btu/hr.	13000	20,000	24,000	
		Cal/hr.	3,276	5,040	6,048	
		kW	3.81	5.60	7.00	
Energy Efficiency	Cooling	EER (Btu/W)	10.00	9.47	9.60	
		EER (W/W)	2.93	2.78	2.81	
	Heating	COP (W/W)	3.07	3.26	2.65	
Moisture Removal		ℓ /hr.	1.5	1.8	2.4	
Air Circulation (Max)		m³/min	8	13.0	14.5	
Noise Level	Indoor High/Low	dB	36 / 26	40 / 32	42 / 35	
	Outdoor High	dB	47	52	55	
Electrical Data						
Power Consumption	Cooling	W	1200	1900	2500	
	Heating	W	1240	1800	2650	
Operating Current	Cooling	A	5.5	8.8	11.5	
	Heating	A	5.7	8.2	12.2	
Dimension & Loading Q'ty						
Net Dimension (WxHxD)	Indoor	mm	825x285x189	1065x298x218	1065x298x218	
	Outdoor	mm	720x548x265	790x548x285	880x638x310	
Net Weight	Indoor	kg	8.4	11	13	
	Outdoor	kg	33.8	39	56	
Shipping Weight	Indoor	kg	10.4	11	16	
	Outdoor	kg	35.8	41	58	
Loading Q'ty	W Pipe	20/40ft/Jumbo	96/205/233	82/170/197	61/128/150	
	W/O Pipe	20/40ft/Jumbo	106/231/259	82/170/197	66/138/153	
Technical Information						
SVC Valve	Liquid	ODxL	φ 6.35mmx5.0m	φ 6.35mmx5.0m	φ 6.35mmx5.0m	
	Gas	ODxL	φ 12.7mmx5.0m	φ 15.8mmx5.0m	φ 15.8mmx5.0m	
Piping Length	STD	m	5	5	5	
	Max	m	15	15	20	
Piping Height	Max	m	7	8	8	
Refrigerant		G	960	1150	1420	
Add Refrigerant		g/m	20	30	40	
Features						
MPI						
Good Morning			●	●	●	
Silver Nano Health System	Silver Coated Filter		●	●	●	
	Silver Coated Evaporator		●	●	●	
	Deodorizing Filter		●	●	●	
Pure & Clean Air	Pure Filter (HAF Filter)					
	Catechin Filter		●	●	●	
	Allergy Filter					
Operating Mode	Digital i Plus					
	Dehumidification		●	●	●	
	Turbo Mode		●	●	●	
	Sleep Mode		●	●	●	
	Timer		●	●	●	
	Energy Saving Mode					
	Auto Restart		●	●	●	
	Auto Changeover					
Convenience	Surrounding Air Control					
	Auto Wind		●	●	●	
	Air Flow Control Steps (Cool/Fan)		4/3	4/3	4/3	
	Air Direction Control (Up/Down)		Auto	Auto	Auto	
	Air Direction Control (Left/Right)		Manual	Manual	Manual	
	Auto Grille			●	●	
	Remote Controller		Compact	●	●	
	Auto Clean (self cleaning)					
Etc.	Compressor Type		Rotary	Rotary	Rotary	
Low Ambient	Cooling	°C				
	Heating	°C				

Specifications of the real product can be different from the above.